

Split

8

Work Order ID 62157-1

PRELIMINARY ISSUE



Page 1

Monday, September 20, 2010 8:27:27 AM

Item ID: D4134-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearplate, LH Aft

Start Date: 9/17/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/24/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan:

Date: 10-9-20

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4134	pbl

100



Waterjet

FLOW CNC Waterjet

304.050

FLOW WATER JET

Memo

1-Cut D4134-1F as per Dwg D4134

Dwg Rev: pbl

Prog Rev: pbl

2-Deburr if necessary

0.00

0.00

10-9-21

3

110



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

0.00

10-9-21

120



QC

Quality Control

QC8- Inspect parts - second check

Memo

0.00

0.00

inspected to PBI

Day only

8/10/04/22

(X3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 62157

Monday, September 20, 2010 8:27:27 AM



Page 2

Item ID: D4134-041

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Start Date: 9/17/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/24/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



Brake NC

Form as per dwg
NC BRAKE

0.00

Memo

0.00

Brake NC

1- Form using DT _____ Die as per Dwg D4134

10-09-27

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

10-09-27

150



Large Fab

Large Fab

Weld per dwg A/R Hardcoat S.S. Batch: M115553
Large Fab

0.00

Memo

0.00

Weld hard surface using DT _____ as per QSI 004 and Dwg D4134

10-09-29

POSITIVE RECALL

EFFECTIVE 10-9-27 AUTH URELEASED CP DATE 10-09-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 62157

Monday, September 20, 2010 8:27:27 AM



Page 3

Item ID: D4134-041

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Item Name: Wearplate, LH Aft

Start Date: 9/17/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/24/2010 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC10- Inspect visual per QSI004- ground welds

0.00 - inspect to 1B1



QC

Memo

0.00

Quality Control

Dry only

8/10/09/28 (B)

170

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

10-09-29

(3)

180

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

M112588

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

8:00
320°
8:30

10-09-29

(3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 62157

Monday, September 20, 2010 8:27:27 AM



Page 4

Item ID: D4134-041

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Revision ID:

Stop



Item Name: Wearplate, LH Aft

Start Date: 9/17/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/24/2010 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

200

0.00



Small Fab

Memo

0.00

Small Fab

I- Bond D4134-3 gasket to inner surface of wearplate using a thin layer of 3M
1300/1300L scotch grip adhesive
Batch 4115230

210

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Handwritten signature and date: 10/09/29 @

Handwritten signature and date: 10.09.29 @

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 62157

Monday, September 20, 2010 8:27:27 AM



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Item ID: D4134-041

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Stop



Item Name: Wearplate, LH Aft

Start Date: 9/17/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/24/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

220



Packaging

Identify as per dwg & Stock Location:

0.00

Packaging

Memo

0.00

Packaging

10.09.29 (2)

230



QC

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Quality Control

10/09/29

10.09.29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Monday, September 20, 2010 8:27:31 AM

Page 1

Work Order ID: 62157

Parent Item: D4134-041

Parent Item Name: Wearplate, LH Aft



Start Date: 9/17/2010

Required Date: 9/24/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 10.06 25 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304S18GA

Purchased

No

100

sf

148.0479

1.5825

3.165317



304/316 .050 Sheet



1310-9-21

Location

Loc Qty

Loc Code

MAT20

148.0479

111743

7.36

112885

18.5179

113062

58.17

115389

64

112885

D4134-3

Manufactured

No

200

Each

0.0000

1

2.000200



Gasket



662160 (2)

9/30/09/29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 62157
Description: WEAR PLATE		Part Number: 04134-041
Inspection Dwg: 04134-1 Rev: pbi		Page 1 of 1

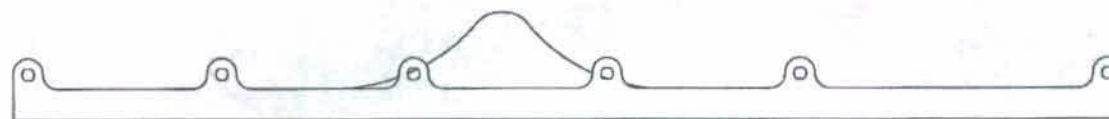
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

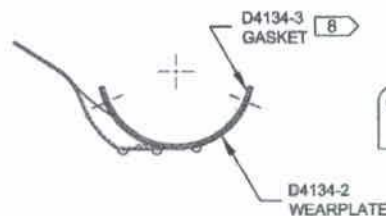
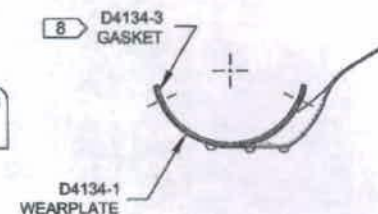
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø .203	± .005 .001	.205	*		✓ 1B02	
.490	± .010	.485	*		✓	
.97	± .030	.963	*		✓	
2.89	± .030	2.886	*		✓	
4.80	± .030	4.794	*		✓	
5.280	± .010	5.279	*		✓	
5.77	± .030	5.765	*		✓	
8.05	± .030	8.200				OK 10/19/22
.375	± .010	.375	*		✓	
5.85	± .030	5.852	*		✓	
8.249	± .010	8.249	*		✓ PRO 02	
13.170	± .010	13.170	*		T 1B01	
15.85	± .030	15.85	*		T	
15.73	± .030	15.73	*		T	
15.98	± .030	15.98	*		T	
18.092	± .010	18.092	*		T	
23.013	± .010	23.013	*		T	
25.85	± .030	25.85	*		T	
27.934	± .010	27.934	*		T	
28.31	± .030	28.31	*		T	
.450	± .010	.452	*		✓	
.300	± .010	.303	*		✓	
.050	± .010	.047	*		✓	

Measured by: PB	Audited by: S	Prototype Approval:	N/A
Date: 10-9-21	Date: 10/09/22	Date:	N/A
inspected to PBI Dwg only		Revised by	Approved
Rev A	Date	KJ/JLM	
Change New Issue			

QTY	QTY	PART NUMBER	DESCRIPTION
-041	-042		
X		D4134-041	WEARPLATE, LH AFT
	X	D4134-042	WEARPLATE, RH AFT
1		D4134-1	WEARPLATE
1	1	D4134-2	WEARPLATE
1	1	D4134-3	GASKET
A/R	A/R	1300 / 1300L	3M SCOTCH-GRIP ADHESIVE



D4134-041 WEARPLATE, LH AFT



D4134-042 WEARPLATE, RH AFT

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI-018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4134-xxx" USING YELLOW PAINT MARKER ON INSIDE SURFACE
- 7) WEIGHT: -041/-042 = 2.2 lbs
- 8) BOND D4134-3 GASKET TO INNER SURFACE OF WEARPLATE USING A THIN LAYER OF 3M 1300/1300L SCOTCH GRIP ADHESIVE

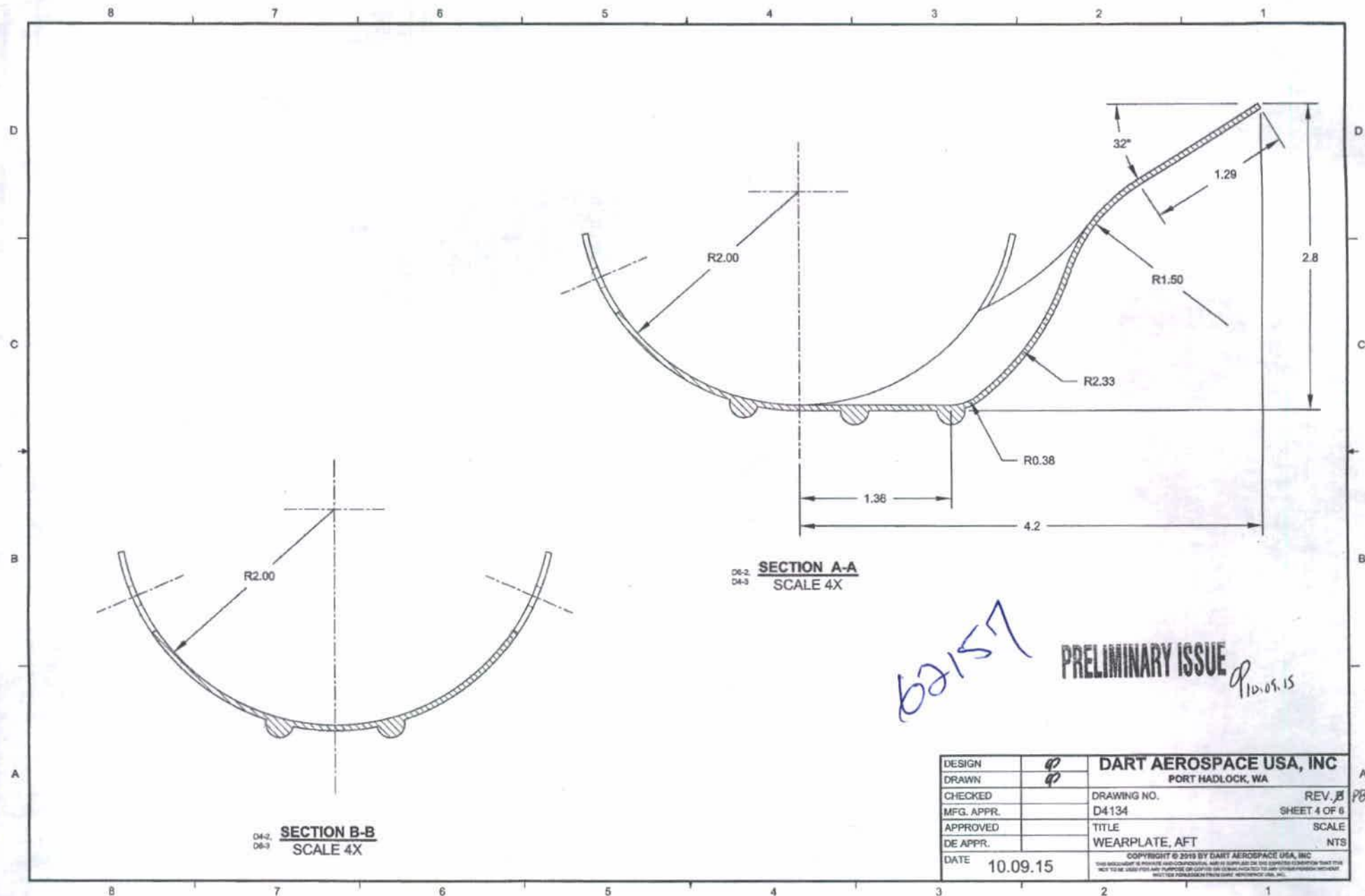
P B I	0.450 WAS 0.300	CP	10.09.15
A	NEW ISSUE	CP	10.06.15
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.09.15		

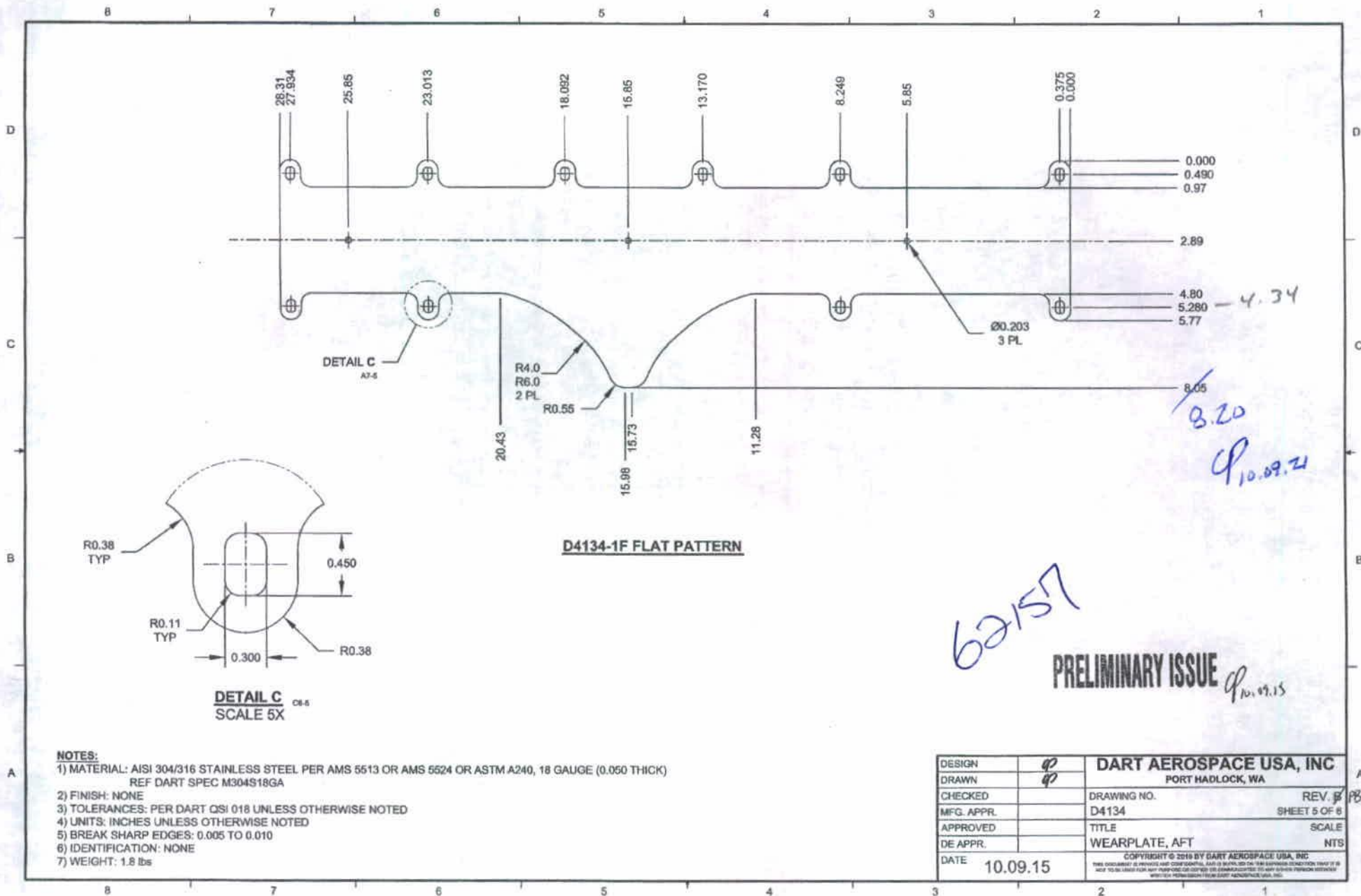
PRELIMINARY ISSUE

DART AEROSPACE USA, INC
PORT HADLOCK, WA

DRAWING NO. D4134
TITLE WEARPLATE, AFT
REV. 1
SHEET 1 OF 6
SCALE
NTS

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Dart Aerospace Ltd

W/O: 62157		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10.09.29	100	Acceptable to D4134 Rev A REF ATTACHED EMAIL	UP	10.09.29		CP 10.09.29 05/042	

Part No: D4134-041 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Chris Provencal

From: David Shepherd [dshepherd@dartaero.com]
Sent: September 29, 2010 2:19 PM
To: 'Chris Provencal'
Cc: 'Marc Bellavance'; 'Mike Petsche'; 'Dan Stow'
Subject: RE: Wearplate photos

No ... ship the wearplates.

David

From: Chris Provencal [mailto:cprovencal@dartaero.com]
Sent: Wednesday, September 29, 2010 12:00 PM
To: 'David Shepherd'
Cc: 'Marc Bellavance'; 'Mike Petsche'; 'Dan Stow'
Subject: RE: Wearplate photos

David,

I am signing off the wearplates based on Rev. A of the dwgs, with the deviation that the wearplates are 0.150 wider. Additionally, on the fwd wearplate, one tab is shifted 0.050" aft, and another tab is shifted .150" aft. This is a minor, non-structural, change to improve fit on the skidtube.

On that basis, do you have any objection to shipping the wearplates today?

-Chris

From: Dan Stow [mailto:dstow@dartaero.com]
Sent: September 29, 2010 12:54 PM
To: 'Mike Petsche'
Cc: 'David Shepherd'; Chris Provencal; 'Marc Bellavance'
Subject: FW: Wearplate photos
Importance: High

Mike,

Can I tell the customer that we are shipping the wearplates today?

Dan

Hello Francesco,

Please see the response from engineering below.

Regards,

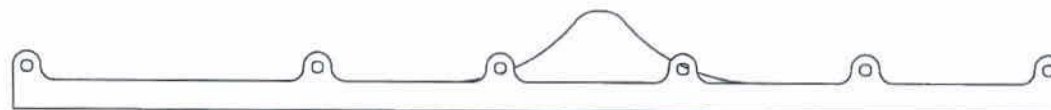
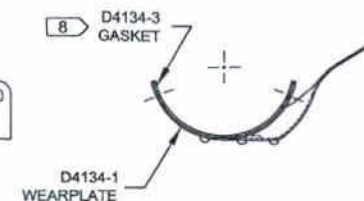
Dan Stow
Technical Support
Dart Aerospace Ltd.
dstow@dartaero.com

QTY	QTY	PART NUMBER	DESCRIPTION
-041	-042		
X		D4134-041	WEARPLATE, LH AFT
	X	D4134-042	WEARPLATE, RH AFT
1		D4134-1	WEARPLATE
	1	D4134-2	WEARPLATE
1	1	D4134-3	GASKET
A/R	A/R	1300 / 1300L	3M SCOTCH-GRIP ADHESIVE

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 62157



D4134-041 WEARPLATE, LH AFT



D4134-042 WEARPLATE, RH AFT

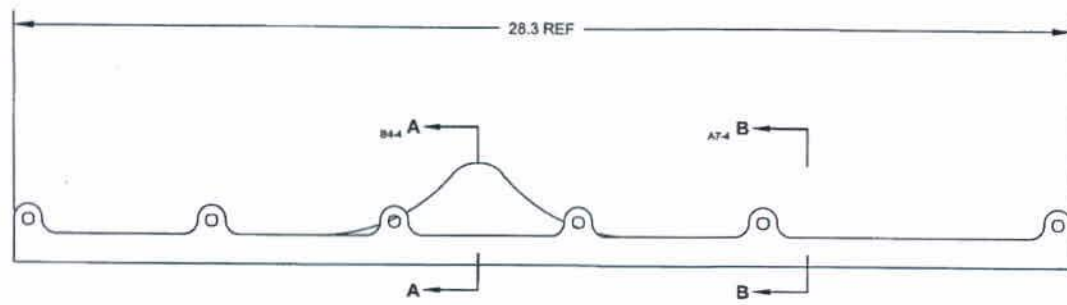
RELEASED
2010-06-28

NOTES:

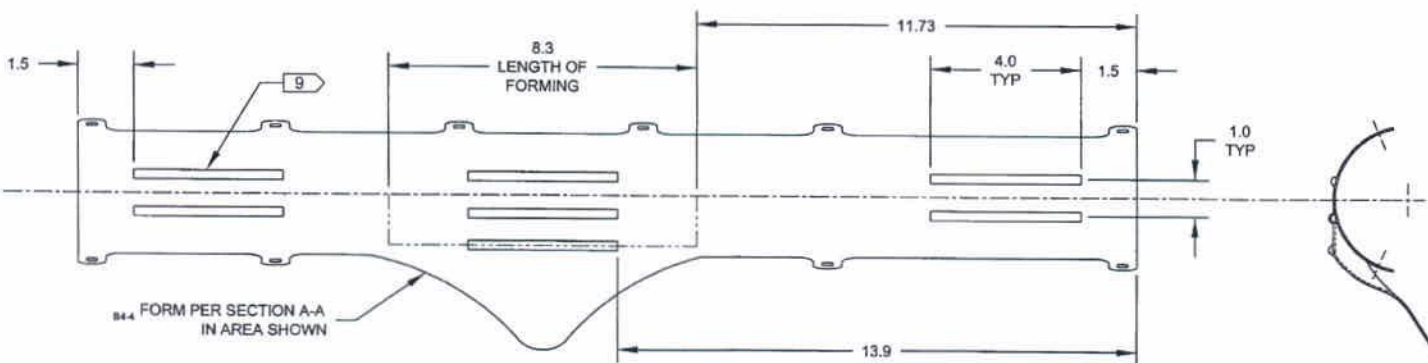
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4134-xxx" USING YELLOW PAINT MARKER ON INSIDE SURFACE
- 7) WEIGHT: -041/-042 = 2.2 lbs
- 8) BOND D4134-3 GASKET TO INNER SURFACE OF WEARPLATE USING A THIN LAYER OF 3M 1300/1300L SCOTCH GRIP ADHESIVE

A	NEW ISSUE		CP	10.06.15
REV.		DESCRIPTION	BY	DATE
DESIGN	97	DART AEROSPACE USA, INC PORT HADLOCK, WA		
DRAWN	97			
CHECKED	97		DRAWING NO.	REV.
MFG. APPR.	97		D4134	SHEET 1 OF 6
APPROVED	97		TITLE	SCALE
DE APPR.	97		WEARPLATE, AFT	NTS
DATE	10.06.15		COPYRIGHT © 2015 BY DART AEROSPACE USA, INC <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR FOR ANY REASON WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

8 7 6 5 4 3 2 1



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RETURN TO
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 62157



D4134-1 WEARPLATE, LH

- NOTES:
- 1) MATERIAL: MAKE FROM D4134-1F
 - 2) FINISH: POWDER COAT "GREY SANTEX" (4.3.5.6) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 1.8 lbs
 - 8) WELD PER QSI 004
 - 9) 2059B HARDCOAT WELDS, 0.063 TO 0.125 HIGH

RELEASED
2010-06-28

DESIGN		DART AEROSPACE USA, INC	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4134	SHEET 2 OF 8
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE, AFT	NTS
DATE	10.06.15	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC THIS DOCUMENT IS UNCLASSIFIED AND IS SUPPLIED ON THE BASIS OF A SERVICE CONTRACT THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC	

8 7 6 5 4 3 2 1